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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,421

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Alexander Engel

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EXAMINER

YOUNG, NATASHA E

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,421	Applicant(s) ENGEL, ALEXANDER	
	Examiner NATASHA YOUNG	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-19 is/are rejected.
- 7) ☒ Claim(s) 9-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5, 7, and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 4,828,997) in view of Heinzen et al (DE 10024154 A1) and Toreki et al (US 2002/0050659 A1).

Regarding claim 1, Yamaguchi et al discloses a reactor bottom of a reactor (1) with an outlet passage (14) (see figure 1 and column 4, lines 29-47).

Yamaguchi et al does not disclose a reactor bottom of a reactor with a collecting funnel formed with an upper side, with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom, and with a closure part for the harvesting opening which is movably arranged in the reactor bottom and displaceable between a closed position in which it closes the

harvesting opening of the collecting funnel, and a discharge position in which it is lowered in the reactor bottom and establishes a connecting between the harvesting opening and the outlet passage.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reaction bottom has a funnel with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom, and with a closure part for the harvesting opening which is movably arranged in the reactor bottom and displaceable between a closed position in which it closes the harvesting opening of the collecting funnel, and a discharge position in which it is lowered in the reactor bottom and

establishes a connecting between the harvesting opening and the outlet passage to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Claims 2-3 depend on claim 1 such that the reasoning used to reject claim 1 will be used of the dependent portions of the claims.

Regarding claim 2, Yamaguchi et al does not disclose a reactor bottom characterized in that the surface of the closure part is configured as a guide or baffle surface for guiding the reactor content from the harvesting opening into the outlet passage.

Heinzen discloses a reactor bottom characterized in that the surface of the closure part is configured as a guide or baffle surface for guiding the reactor content from the harvesting opening into the outlet passage (see figure 1), since the funnel guides the reactor content from the harvesting opening into the outlet passage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Regarding claim 3, Yamaguchi et al does not disclose a reactor bottom characterized in that the surface of the closure part forms a collecting region at a deep

lying level whereby the collecting region in the lowered discharge position of the closure part is juxtaposed with the outlet passage.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom is characterized in that the surface of the closure part forms a collecting region at a deep lying level whereby the collecting region in the lowered discharge position of the closure part is juxtaposed with the outlet passage to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Claim 4 depends on claim 3 such that the reasoning used to reject claim 3 will be used to reject the dependent portions of the claim.

Regarding claim 4, Yamaguchi et al does not disclose a reactor bottom characterized in that the collecting region on the surface of the closure part is configured with a point shape or line shape.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom is characterized in that the collecting region on the surface of the closure part is configured with a point shape or line shape to allow the collected capsules to be recovered from the reaction column

and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Claims 5 and 7 depend on claim 1 such that the reasoning used to reject claim 1 will be used of the dependent portions of the claims.

Regarding claim 5, Yamaguchi et al discloses a reactor bottom of a reactor (1) with an outlet passage (14) (see figure 1 and column 4, lines 29-47).

Yamaguchi et al does not disclose a reactor bottom characterized in that the harvesting opening is located eccentrically to the central axis of the collecting funnel and especially the edge of the harvesting opening coincides with the central axis of the collecting funnel.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom is characterized in that the harvesting opening is located eccentrically to the central axis of the collecting funnel and especially the edge of the harvesting opening coincides with the central axis of the collecting funnel for the predictable result of the capsules gathering at the outlet passage to be collected and to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Regarding claim 7, Yamaguchi et al discloses a reactor bottom of a reactor (1) with an outlet passage (14) (see figure 1 and column 4, lines 29-47).

Yamaguchi et al does not disclose a reactor bottom characterized in that the surface of the closure part is flush in its closed position to the surface of the collecting funnel.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom has a closure part to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to position the gate valve that the bottom of the collecting funnel such that the closure mechanism is flushed with the surface of the collecting funnel when the closure part gate valve) is in the closed position, since it has been held that rearranging parts of an invention involves only routine skill in the art (see MPEP 2144.04 (VI-C)).

Claims 11-14 depend on claim 1 such that the reasoning used to reject claim 1 will be used to reject the dependent portions of the claims.

Regarding claim 11, Yamaguchi et al a reactor bottom characterized in the reactor bottom is formed in one piece with the reactor (1) (see figure 1 and column 4, lines 29-47).

Yamaguchi et al does not disclose that the reactor wall surrounds a collecting funnel.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1) such that the reactor wall surrounds a collecting funnel.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Regarding claim 12, Yamaguchi et al does not disclose a reactor bottom characterized in that the closure part is displaceable manually or by means of a drive device arranged on the reactor bottom.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4) such that the closure part is displaceable manually or by means of a drive device arranged on the reactor bottom

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Toreki et al such that a reactor bottom is characterized in that the closure part is displaceable manually or by means of a drive device arranged on the reactor bottom to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Regarding claim 13, Yamaguchi et al does not disclose a reactor bottom characterized in that the funnel or conical angle of the collecting funnel is substantially 130° to 170° , especially 153° .

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the funnel or conical angle of the collecting funnel is substantially 130° to 170° , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (see MPEP 2144.05 (II-A)).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to the funnel or conical angle of the collecting funnel is 153° , since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (see MPEP 2144.05 (II-B)).

Regarding claim 14, Yamaguchi discloses a method of separating a phase from a phase mixture in a reactor with a reactor bottom whereby the phase mixture (droplet

of colloidal suspension and liquid stream of gelling agent) is introduced into the reactor and the phases are separated (gel beads of liquid stream of gelling agent), and the accumulated beads are occasionally withdrawn (see column 4 line 48 through column 5, line 51).

Yamaguchi does not disclose the phases are separated and in the closed position of the closure part, deposits on the collecting funnel and then a connection is opened between the harvesting opening and the outlet passage whereby the desired phase is discharged through the harvesting opening and the outlet passage of the reactor.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that phases are deposited on the collecting funnel and then a connection is opened between the harvesting opening and the outlet passage whereby the desired phase is discharged through the harvesting opening and the outlet passage of the reactor for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom has a closure part to be in the closed position when the phases are separated to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Claims 15-16 depend on claim 14 such that the reasoning used to reject claim 14 will be used to reject the dependent portions of the claims.

Regarding claim 15, Yamaguchi et al discloses a method characterized in that the phase mixture is a mixture of solid and liquid phases and the phase separation is carried by sedimentation(see column 4 line 48 through column 5, line 51), since the gel bead exit below the reactor.

Regarding claim 16, Yamaguchi et al does not disclose a method characterized in that the phase mixture is a hardening bath and capsules are contained in the hardening bath as the phase to be separated.

Heinzen et al discloses a hardening bath (10) before entering the collecting cone (or funnel) (see the last four paragraphs of machine translation of the description and figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that phases are deposited on the collecting funnel and then a connection is opened between the harvesting opening and the outlet passage whereby

the desired phase is discharged through the harvesting opening and the outlet passage of the reactor for the predictable result of the capsules gathering at the outlet passage to be collected and to harden the capsules.

Claims 17-19 depend on claim 16 such that the reasoning used to reject claim 16 will be used to reject the dependent portions of the claims.

Regarding claim 17, Yamaguchi et al does not disclose a method characterized in that especially before the withdrawal of the capsule in a further method step the hardening bath is discharged through the discharge passage and rinsing liquid is introduced into the reactor and is then discharged through the discharge passages, this method step being carried out once or a number of times.

Heinzen et al discloses method characterized in that especially before the withdrawal of the capsule in a further method step the hardening bath is discharged through the discharge passage and rinsing liquid is introduced into the reactor and is then discharged through the discharge passages (16) (see the last four paragraphs of machine translation of the description and figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the hardening bath is discharged through the discharge passage and rinsing liquid is introduced into the reactor and is then discharged through the discharge passages for the predictable result of the capsules gathering at the outlet passage to be collected and to harden the capsules.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to repeat the step of the hardening bath is discharged through the discharge passage and rinsing liquid is introduced into the reactor and is then discharged through the discharge passages for the predictable result of ensure the capsule is hardened completely.

Regarding claim 18, Yamaguchi et al does not disclose a method characterized in that the capsules are sodium cellulose capsules.

However, Yamaguchi et al disclose the gel beads are of microbial cells or enzyme enclosed in gels (see column 1, lines 52-62).

Heinzen et al discloses the encapsulation may be of vegetable or animal cells (see first two paragraphs of machine translation of the description).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the method may be used to encapsulate cellulose for the predictable result of the capsules gathering at the outlet passage to be collected and to harden the capsules.

Regarding claim 19, Yamaguchi et al discloses a method characterized in that the capsules contain biological cells, especially animal, human or plant cells see column 1, lines 52-62).

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (US 4,828,997), Heinzen et al (DE 10024154 A1), and Toreki et al (US

2002/0050659 A1) as applied to claim 1 above, and further in view of Lockwood (US 3,690,842).

Claim 6 and 8 depend on claim 1 such that the reasoning used to reject claim 1 will be used to reject the dependent portions of the claims.

Regarding claim 6, Yamaguchi et al does not disclose a reactor bottom characterized in that the surface of the closure part is inclined with respect to the central axis or is domed.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel and which connects to an outlet passage extending through the reactor bottom for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom has a closure part to

allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Lockwood discloses a closure part (14, 25) wherein the surface of the closure part is inclined with respect to the central axis or is domed (see figures 1-3 and column 4, lines 34-55 and column 5, lines 17-45) which discloses the lifting and lowering of a bail (14) or rod (25) to adjust the level of a catalyst bed in a fluidized bed reactor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al, Heinzen et al, and Toreki et al with the teachings of Lockwood for the predictable of collecting a select amount of the reactor content.

Regarding claim 8, Yamaguchi et al discloses a reactor bottom of a reactor (1) with an outlet passage (14) (see figure 1 and column 4, lines 29-47).

Yamaguchi et al does not disclose a reactor bottom characterized in that an outlet recess extends in the reactor bottom from the harvesting opening and is especially parallel to the central axis of the collecting funnel and receives the closure part slidably and at least one outlet passage opens into the outlet recess.

Heinzen et al discloses a reaction vessel (A) with a collecting cone (or funnel) (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Yamaguchi et al with the teachings of Heinzen et al such that the reactor bottom has a collecting funnel formed with an upper side with a receiving opening formed in the collecting funnel, and an outlet recess

extends in the reactor bottom from the harvesting opening and is especially parallel to the central axis of the collecting funnel for the predictable result of the capsules gathering at the outlet passage to be collected.

Toreki et al discloses a cut off isolation gate valve (210), to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see paragraph 0047 and figures 1 and 4) such that at least one outlet passage opens into the outlet recess.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al and Heinzen et al with the teachings of Toreki et al such that a reactor bottom has a closure part to allow the collected capsules to be recovered from the reaction column and collected without disturbing the continuing process (see Toreki et al paragraph 0047).

Lockwood discloses a closure part (14, 25) wherein the surface of the closure part is inclined with respect to the central axis or is domed (see figures 1-3 and column 4, lines 34-55 and column 5, lines 17-45) which discloses the lifting and lowering of a bail (14) or rod (25) to adjust the level of a catalyst bed in a fluidized bed reactor such that the closure part can be slid up and down.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined teachings of Yamaguchi et al, Heinzen et al, and Toreki et al with the teachings of Lockwood for the predictable of collecting a select amount of the reactor content.

Allowable Subject Matter

Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 9, the limitation of "a reactor bottom characterized in that an annular groove is formed in the wall of the outlet recess and/or a plurality of openings are formed therein, which communicate with the outlet passage" was not disclosed or suggested in the prior art.

Regarding claim 10, the limitation of "a reactor bottom characterized in that at least one discharge passage opens into the collecting funnel) and is closed with a sieve" was not disclosed or suggested in the prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATASHA YOUNG whose telephone number is (571)270-3163. The examiner can normally be reached on Mon-Thurs 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NY

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797